

ICTs and interactive multimedia b-learning environments for teaching and learning English as a foreign/second language

E. Bañados*,¹ y M. Ripoll²

¹CFRD Centro de Formación y Recursos Didácticos, Barrio Universitario, Universidad de Concepción, Chile.

DEPARTAMENTO DE IDIOMAS EXTRANJEROS, Universidad de Concepción, Chile. Casilla 160-C, correo 3, Concepción, Chile.

²CETED Centro de Tecnología para la Docencia, Barrio Universitario, Edificio Enlaces, Concepción, Chile.

This paper describes an interactive multimedia b-learning communicative English program which has been created using ICT tools to put SLA learning principles and CALL materials design issues into practice for innovating the teaching and learning of English as a foreign/second language [1]. The program aims to develop integrated linguistic skills, with an emphasis on listening comprehension and oral production, and a focus on learning for authentic communication. The b-learning program encompasses: (a) learners' work with an e-learning interactive multimedia language learning environment, (b) online monitoring (c) face-to-face EFL teacher-led classes, and (d) interaction and culture workshops with native speakers of English. The program has been implemented successfully with tertiary education students, university teachers, and non-professional workers. It will now be implemented at middle school and high school education level at socially and economically deprived schools, through ENLACES, program to evaluate its technical usability and propose it as a model to innovate current practices with the use of ICT.

KEY WORDS: b-learning, e-learning, CALL, multimedia applications for SLA, EFL and ICT, feedback, task-based learning, interaction, CMC.

1. English Language teaching and learning in the Chilean context

The Government of Chile seeks to create the conditions for the country's transition into a knowledge-based economy, where the ability to produce, adapt, diffuse and commercialize knowledge is becoming an increasingly important determinant of economic growth and quality of life improvements. Thus, the Ministry of Education is engaged in offering Chilean citizens equal opportunities to build the skills and knowledge necessary to succeed in a highly competitive global environment. Two of these so called "skills for the coming challenges," as agreed by APEC participating economies: (1) proficiency in foreign languages, like English and (2) and competence in the use of ICT.

The English language has become a priority for equity to access knowledge and to facilitate Chilean citizens' proactive participation in an economy of trade agreements with the European Union, the Asia-Pacific region, the United States, Canada, and New Zealand. The vast majority of schools in Chile teach English, some schools also choose to teach other languages such as French, German, Italian, and recently there has been an interest to teach Chinese Mandarin through some pilot program initiatives with Chinese native speakers in some schools. The average level of English that Chilean students learn at state-maintained and subsidized schools is insufficient to enable them to function effectively in English (see

* Corresponding author: e-mail: ebanados@udec.cl Teléfono: +56 41 2207040

[assessment](#) of a sample of 12.000 students[2]). Thus, improving the teaching and learning of English is one of the Ministry of Education's challenges for the present decade. The teaching of English within the national context implies dealing with difficulties such as a lack of enough English teachers for the whole country, a large number of students per class (30 to more than 40), a heavy teaching load (normally 30 to 40 direct teaching), a lack of enough language teaching materials such as books, dictionaries, authentic material and technological and audiovisual resources. Besides, the remote geographical location of the country makes it impossible for the average Chilean citizen to travel to English-speaking countries to practice the target language with native speakers and to learn about the language culture. The Government has therefore allocated resources to improve and strengthen the teaching and learning of the English language from elementary school to tertiary education. The Ministry of Education launched a program in 2003 under the motto [English opens doors](#) [3], from elementary to high school level, (EODP) to foster EFL teachers' professional development as a way to promote better teaching practices and language learning. At tertiary education level, the government has invited universities that are members of the [Council of Rectors](#) [4] to submit [MECESUP projects](#) [4] financed by the Ministry of Education, the Worldbank and the universities. MECESUP projects are meant to support and improve a variety of disciplines at undergraduate and graduate studies and a number of them have been awarded projects related to improving language teaching and learning processes using technology.

Regarding ICT skills, the Chilean government has placed a strong emphasis on using technology across the curriculum. Thus, in 1992 the government launched [ENLACES Project](#) [5], as part of a national policy to introduce ICT in the country with a focus on equity promoting access to new technologies in the schools through the implementation of computers connected to Internet. ENLACES aims to promote and expand the use of ICT to improve teaching-learning processes in all state-maintained and state-subsidized schools along the country, in an attempt to facilitate the access of school communities to technology as a new resource for enhancing teaching and learning processes. This national effort has enable access to technology to more than 8.000 schools and TeleCenters for the community, including rural areas and remote locations. At tertiary education level, resources have been allocated through government projects like MECESUP to build technology centers so as to facilitate access to technology and to innovate pedagogical practices using ICT.

2. What elements do we combine in the communicative English program pedagogical model?

The complete communicative English program aims to achieve a B-1/B-2 *independent user* competence level, in line with the Common European Framework of Reference for Modern Languages [6], and lasts a total of two academic years at the university. The b-learning pedagogical model combines:

- (a) Learners' independent work with CALL tasks and materials for developing language skills in an online web- based interactive multimedia environment.
- (b) Online and face-to-face tutoring by EFL teacher-tutors who are able to see students' progress at first-hand and write their feedback on the language tasks carried out and work delivered to personal online portfolios. Learners' assignments include oral and written work as products of computer supported individual and collaborative learning tasks.
- (c) Face-to-face classes with EFL teacher-tutors, which are held solely in English. These sessions encompass communication-based activities designed to give learners practice in the main thematic, functional, grammatical, and vocabulary-related topics of the online lessons. The face-to-face classes serve as

an opportunity to check learning outcomes, to provide feedback and to emotionally support learners helping them build their personal confidence to feel comfortable and self-assured speaking the language.

(d) In addition to teacher-led classes, students attend a weekly one hour interaction and culture workshop with a native speaker of English. Learners play games, do information-gap activities, do role-plays, learn about and discuss about similarities and differences between the native and foreign language cultures. These sessions are held in small groups and are designed to be fun and a source of motivation for the learners, who can practice their language skills in authentic communicative situations with their native speaking teachers.

3. The interactive multimedia environment for learning English

The interactive multimedia environment is one central web-based platform made up of four modules that contain all the CALL materials, task-based activities, and ICT tools learners need to use in the coursework. Learners find explicit objectives, a friendly guidance, and clear instructions of what they are expected to do to achieve their language learning goals (see figure 1). This has been done taking into account design issues for CASLA (Computer Applications for Second Language Applications) [7], such as management, control, input, content, and feedback. Each module contains about a hundred hours of language learning activities which provide learners opportunities to learn by doing, develop autonomy, to work at their pace in an attractive and fun-filled multimedia e-learning environment, which includes language games, karaoke singing, feature film extracts, vocabulary learning tools, among other features.



Figure 1: CALL design issues: clear guidance, management and control

The theoretical framework underlying the multimedia environment draws from cognitive, sociocognitive and interactionists' perspectives on SLA [8,9,10,11,12,13,14,15,16,18], methodological principles for task-based language teaching in distance learning [20], criteria for CALL tasks appropriateness [21], conditions for optimal CALL environments [22], and a range of teaching methodologies for network-based language teaching and e-learning pedagogy [23,24,25,26,27,28,29,30]. The software represents an attempt to combine theoretical principles and put them into practice in the language learning materials exploiting the capabilities of ICT functionalities, multimedia applications and CMC for foreign/second language learning practices. Some of the core concepts underlying its materials design are multimodal L2 input exposure, enhanced input, learner fit content delivery, interaction (human/computer, human/human, and intrapersonal) through computer supported collaborative and individual learning tasks.

Learners are exposed to second language input through locally produced videos and audiovisual material depicting real characters which allow for multimodal content delivery to reach heterogeneous learning styles. Students interact with local and global communities in communicative and collaborative tasks which engage them in socio-cognitive processes and give them opportunities to communicate with a real

audience. They can focus on English output by means of specially designed interactive recording tools. Special attention is given to issues of online pedagogy, such as providing a more human-like dimension for positive and corrective feedback, giving students the sense of belonging to a learning community, and helping them develop their self-confidence as they work on their language skills through individual practice, communication- both through CMC and face-to-face- and collaboration.

4. Outcomes

The results obtained with tertiary education groups, university teachers and non-professional workers, who have been trained with the program, show an important positive impact on different aspects: the learners' language skills, specially in listening and speaking, management of ICT tools, satisfaction levels with the entire Communicative English Program, as well as on cross-curriculum objectives such as developing autonomy, building learning confidence, creating networks, promoting collaboration, a positive attitude and motivation towards learning a foreign language and about its culture, results which come to support the effectiveness of the b-learning model implemented. Our next goal is to implement the program in middle school and high school education levels, with schools participating in ENLACES program, particularly in a socially and economically deprived context. The first objective is to evaluate the technical usability and then the effectiveness of the pedagogical model in such a context.

5. References

- [1] Bañados E. 2006. A b-learning pedagogical model for teaching and learning EFL successfully through a networked interactive multimedia environment. *CALICO Journal*, 23(3), 533-550. Special Issue. What does it take to teach online? Towards a Pedagogy of Online Teaching and Learning.
- [2] http://www.ingles.mineduc.cl/index_sub2.htm?id_contenido=685&id_seccion=28&id_portal=8
- [4] <http://www.mecesup.cl/>
- [5] <http://www.enlaces.udec.cl/>
- [6] <http://www.coe.int/>
- [7] Chapelle, C.A. (2001). *Computer Applications in Second Language Acquisition. Foundations for teaching, testing and research*. Cambridge University press.
- [8] Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon Press.
- [9] Skehan, P. (1998). *A Cognitive Approach to Language Learning*. Oxford University Press.
- [10] Chapelle, C. A. (1998). Multimedia CALL: Lessons to be learned from research on instructed SLA. *Language Learning*, 2(1), 22-34.
- [11] Chapelle, C.A. (2001). *Computer Applications in Second Language Acquisition. Foundations for teaching, testing and research*. Cambridge University press.
- [12] Chapelle, C.A. (2003). *English language learning and technology: Lectures on teaching and research in the age of information and communication*. Amsterdam: John Benjamins Publishing.
- [13] Chapelle, C.A. (2005). Interactionist SLA theory in CALL research. In J. Egbert and G. Petrie, (Eds.) *Research perspectives on CALL*, (pp. 53-64). Mahwah, NJ: Laurence Erlbaum Associates.

- [14] Ellis, R. (1999). *Learning a second language through interaction*. Amsterdam: John Benjamins Publishing Company.
- [15] Gass, S. (1997). *Input, interaction, and the second language learner*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- [16] Long, M. H. (1996). The role of linguistic environment in second language acquisition. In W. C. Ritchie, & T. K. Bhatia, (Eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego: Academic Press.
- [17] Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15, 165-179.
- [18] Robinson, P. (1995). Attention, memory, and the noticing hypothesis. *Language Learning* 45/2:283-331.
- [19] Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *The Modern Language Journal*, 81, 470-481.
- [20] Doughty, C. J., & Long, M. H. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning*, 7(3), 50-80.
- [21] Chapelle, C.A. (2001). *Computer Applications in Second Language Acquisition. Foundations for teaching, testing and research*. Cambridge University press.
- [22] Egbert & E. Hanson-Smith (Eds.)(1999). *CALL Environments: Research, Practice, and Critical Issues.*, Alexandria: TESOL.
- [23] Chapelle, C.A. (2003). *English language learning and technology: Lectures on teaching and research in the age of information and communication*. Amsterdam: John Benjamins Publishing.
- [24] Chapelle, C.A. (2005). Interactionist SLA theory in CALL research. In J. Egbert and G. Petrie, (Eds.) *Research perspectives on CALL*, (pp. 53-64). Mahwah, NJ: Laurence Erlbaum Associates.
- [25] Chapelle, C.&Joan Jamieson (2002). Paper from the Conference on Less Commonly Taught Languages, Sponsored by CLEAR at Michigan State University, February 1-3, Arlington, Virginia.
- [26] Chun, D.C. & Plass, J.L. (2000). Networked multimedia environments for second language acquisition. In M. Warschauer & R. Kern (Eds.), *Network-Based Language Teaching: Concept and Practice*. Cambridge Applied Linguistics Series (pp. 151-170). Cambridge: Cambridge University Press.
- [27] Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *The Modern Language Journal*, 81, 470-481.
- [28] Warschauer, M. & R. Kern. (2000). *Network-based Language Teaching Concepts and Practice*. Cambridge University Press.
- [29] Warschauer, M., H. Shetzer & C. Meloni. (2000). Internet for English Teaching. TESOL, Inc., USA.
- [30] Felix, U. (2003). Teaching languages online: Deconstructing the myths. *Australian Journal of Educational Technology*, 19(1), 118-138.